



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/758,513	01/11/2001	Rainer Ludwig	HOE522	8395

7590

12/11/2003

Edward J. Timmer
Walnut Woods Center
5955 W. Main Street
Kalamazoo, MI 49009

EXAMINER

MCCLOUD, RENATA D

ART UNIT	PAPER NUMBER
----------	--------------

2837

DATE MAILED: 12/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. Box 1450
ALEXANDRIA, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 21

Application Number: 09/758,513
Filing Date: January 11, 2001
Appellant(s): LUDWIG, RAINER

Edward J. Timmer
For Appellant

EXAMINER'S ANSWER

MAILED

DEC 11 2003

GROUP 2800

This is in response to the appeal brief filed 6 October 2003.

Art Unit: 2837

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

This appeal involves claims 1 and 3-39.

Claims 1, 3-5, 10, and 39 have are the finally rejected claims.

Claim 2 is cancelled.

Claims 6-9 and 11-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

Art Unit: 2837

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 1 and 3-39 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

6,130,516

Huber et al.

10-2000

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 3-5, and 39 are rejected under 35 U.S.C. 102(a) as being anticipated by Huber et al (U.S. Patent 6,130,516).

Claim 1: Huber et al teach monitoring device (Fig. 1) for checking for a predefined position of a body or for checking for the presence of a body with a pivotal

Art Unit: 2837

checking element (Fig. 1: 34 and 32), a motor (Fig. 1:20) with a shaft (Fig. 1: 26) for driving the checking element (Fig. 1: 34 and 32), a housing (Fig. 1: 16) for accommodating the motor (Fig. 1: 20) and having an end face (Fig. 1:end of 16) through which the shaft (Fig. 1: 26) passes, and a seal (Fig. 1, the area between #28 and #30, shown in shaded in drawing below) between the checking element (Fig. 1:34) and the housing (Fig. 1:16) around the shaft (Fig. 1:26) wherein the seal (Fig. 1, the area between #28 and #30, shown in shaded in drawing below) abuts on the checking element (Fig. 1:34) and on the housing (Fig. 1:16).

Claim 3: Huber et al teach the seal (Fig. 1, area between #28 and #30, shown shaded in drawing below) is formed symmetrically about an axis (Col. 2:60-64).

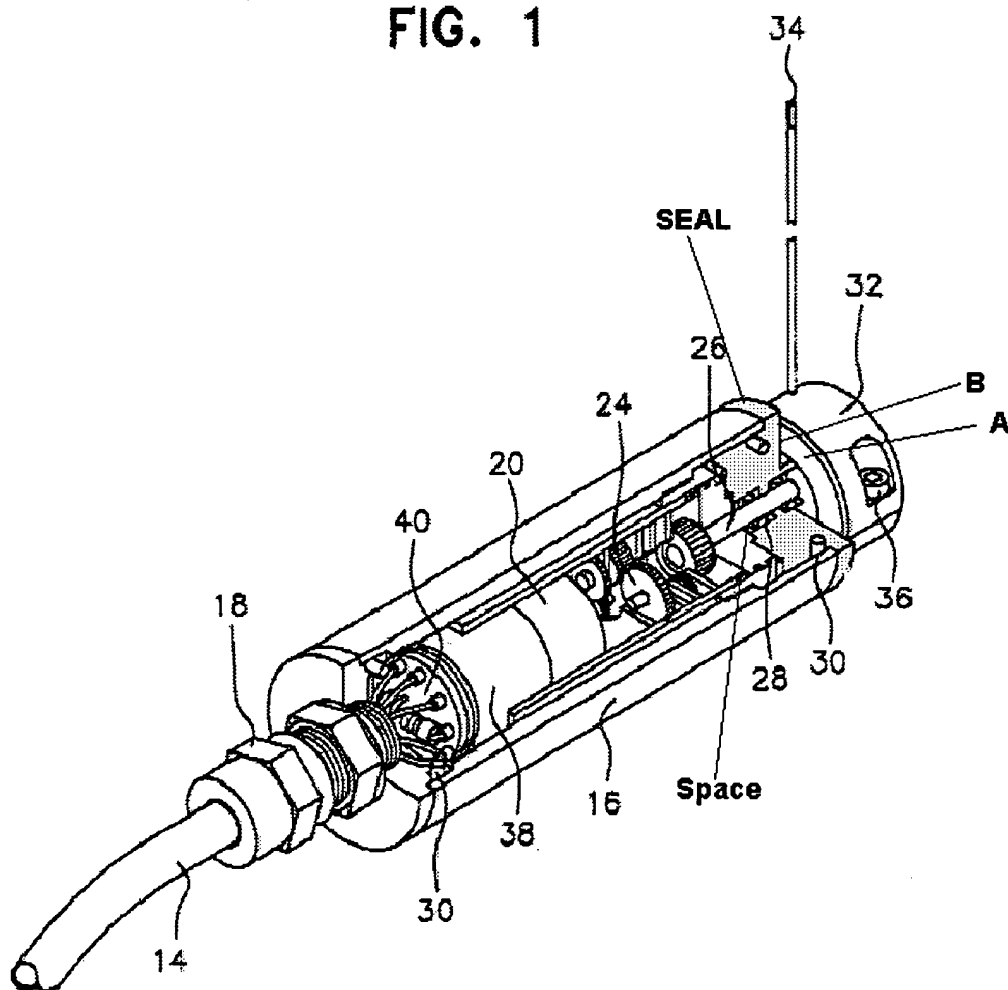
Claim 4: Huber et al teach the seal (Fig. 1, area between #28 and #30, shown shaded in drawing below) is between the checking element (Fig. 1: 34 and 32) and the housing (Fig. 1:16) co-axially relative to the shaft (Fig. 1: 26).

Claim 5: Huber et al teach a space (Fig. 1; space around #28, as in the space to the immediate right and left of 28) between the shaft (Fig. 1:26) and the seal (Fig. 1, area between #28 and #30, shown shaded in drawing below).

Claim 39: Huber et al teach monitoring device (Fig. 1) for checking for a predefined position of a body or for checking for the presence of a body with a pivotal checking element (Fig. 1: 34), a motor (Fig. 1:20) with a shaft (Fig. 1: 26) for driving the checking element (Fig. 1:34 and 32), a housing (Fig. 1: 16) for accommodating the motor (Fig. 1: 20) and having an end face (Fig. 1:end of 16) through which the shaft (Fig. 1: 26) passes, and a seal (Fig. 1, the area between #28 and #30, shown in shaded

Art Unit: 2837

in drawing below) between the checking element (Fig. 1:34) and the end face of the housing (Fig. 1:16) around the shaft (Fig. 1:26) wherein the seal (Fig. 1, the area between #28 and #30, shown in shaded in drawing below) abuts on the checking element (Fig. 1:34 and 32) and abuts on the end face of the housing (e.g. Fig. 1, the area between #28 and #30, shown as a shaded area in the drawing below, is a seal that abuts checking element #34 and housing #16).

FIG. 1

Art Unit: 2837

(11) Response to Argument**FIRST ISSUE**

Claim 1: With respect to applicant's argument that Huber et al teach a face-sided cover, and not a seal as in applicant's claim 1, the examiner agrees with applicant that Huber et al teach a face-sided cover, however there is nothing in applicant's claim language that precludes the examiner from reading this face-sided cover as being a seal. Applicant's claim 1 recites the limitation "a seal which is arranged between the checking element and the housing and which extends around a shaft". This limitation is broad and does not limit the claimed "seal" to any particular type of seal. A seal, as in this case, is a device that closes, shuts, or fastens. Referring to the enclosed Fig. 1 above, the shaded area pointed to as "SEAL", is a device that closes, shut, or fastens the housing (16). This "SEAL" (also referred to as a face-sided cover) is between the checking element (34 and 32 combined) and the housing (16) and extends around a shaft (26).

Also, the examiner agrees with applicant that Huber et al states the double lip seal (28) seals the passage of the shaft (26) through the face-sided cover of the housing (16) against chips and coolants. However, applicant is not claiming what the seal is sealing, applicant is only claiming "a seal which is arranged between the checking element and the housing and which extends around a shaft". Therefore, it is

Art Unit: 2837

not unreasonable for the examiner to read the "face-sided cover" of Huber et al as a seal as shown labeled in Fig. 1 above.

The examiner also agrees with applicant that Huber et al teach a pin holder (32) is clamped via set screw (36) on the stump of the shaft (26) that projects beyond housing (16). However, the examiner does not agree with applicant that there is a space between the area between reference numbers (28) and (30), also referred to as the face-sided cover, and the checking element (32 and 34). Referring to Fig. 1 of Huber et al, the surface labeled as "A", the surface of the checking element (32 and 34), obviously touches the surface labeled "B", a surface of the "SEAL".

Claim 3: With respect to applicant's argument that seals (28) and (30) of Huber et al are not arranged between the checking element (34) and the housing (16) and do not abut on both the housing and the checking element, this was not a basis of the examiner's rejection. The examiner rejected claim 3 on the basis that Huber et al teach the seal (Fig. 1, area between #28 and #30, shown shaded in drawing below) is formed symmetrically about an axis (Col. 2: 60-64). Also, as addressed above in the response to the arguments of claim 1, there is nothing in applicant's claim language that precludes the examiner from reading the face-sided cover of Huber et al as being a seal. Applicant's claim 1 recites the limitation "a seal which is arranged between the checking element and the housing and which extends around a shaft". This limitation is broad and does not limit the claimed "seal" to any particular type of seal. A seal, as in this case, is a device that closes, shuts, or fastens. Referring to the enclosed Fig. 1

Art Unit: 2837

above, the shaded area pointed to as "SEAL", is a device that closes, shut, or fastens the housing (16). The "SEAL" is between the checking element (34 and 32 combined) and the housing (16) and extends around a shaft (26).

Claim 4: With respect to applicant's argument that seals (28) and (30) of Huber et al are not arranged between the checking element (34) and the housing (16) and do not abut on both the housing and the checking element, this was not a basis of the examiner's rejection. The examiner never stated that seal double-lipped seal (28) and the o-ring seal (30) are arranged between checking element (34) and the housing (16). The examiner rejected claim 4 on the basis that Huber et al taught a seal (Fig. 1, area between #28 and #30, shown shaded and labeled as "SEAL" in drawing above) between the checking element (Fig. 1: 34 and 32) and the housing (Fig. 1:16) co-axially relative to the shaft (Fig. 1: 26; Col. 2:60-64). The examiner referred to the area between (28) and (30), also referred to as the face-sided cover, as the seal. Also, as addressed above in the response to the arguments of claim 1, there is nothing in applicant's claim language that precludes the examiner from reading the face-sided cover as being a seal. Applicant's claim 1 recites the limitation "a seal which is arranged between the checking element and the housing and which extends around a shaft". This limitation is broad and does not limit the claimed "seal" to any particular type of seal. A seal, as in this case, is a device that closes, shuts, or fastens. Referring to the enclosed Fig. 1 above, the shaded area pointed to as "SEAL", is a device that closes, shut, or

Art Unit: 2837

fastens the housing (16). The "SEAL" is between the checking element (34 and 32 combined) and the housing (16) and extends around a shaft (26).

Claim 5: With respect to applicant's argument that seals (28) of Huber et al appear to abut on the shaft (26) such that there is no intermediate space between the shaft and the seal, the examiner referred to the area around (28), as in the area to the left and right of (28). As shown in Fig. 1, there is clearly a space around the shaft (26), the space being to the immediate left and right of the seals (28). This is shown in Fig. 1 above, labeled as "SPACE". Since the examiner referred to the seal as being the area between (28) and (30), also referred to as the face-sided cover, there is a space between the seal and the shaft (26).

Claims 6-9: With respect to applicant arguments of claim 6, that neither double lip seal (28) or o-ring seal (30) rotates with checking element (34), the examiner agrees with applicant, and has withdrawn the rejection of claims 6-9.

Claim 10: With respect to applicant's argument that Huber et al do not teach an outer diameter of the seal substantially corresponds to the diameter of the checking element since double lipped seal (28) and o-ring seal (30) teach away from claim 10, the examiner never rejected claim 10 on the basis that (28) and (29) were the seals between the housing and the checking element. The examiner rejected claim 10 on the basis that the area between (28) and (30), shown shaded in the above enclosed Fig. 1,

Art Unit: 2837

was the seal between the housing (16) and the checking element (34 and 32 combined). The examiner agrees with applicant that Huber et al teach the area between (28) and (30) as being a face-sided cover, however as further discussed in the response to arguments of claim 1, there is nothing in applicant's claim language that precludes the examiner from reading this face-sided cover as being a seal. With this being said, the claim limitation "an outer diameter of the seal substantially corresponds to the diameter of the checking element" is broad. The examiner read this limitation to mean that the diameter of the checking element was almost or somewhat equal to or similar to the diameter of the checking element. As shown in Fig. 1, the checking element comprises (34), (32), and (36). The part (32) has a rim that abuts the seal. The diameter of this rim, which is part of the checking element, is almost similar to the diameter of the seal.

SECOND ISSUE

Claim 39: With respect to applicant's argument that Huber et al teach a face-sided cover, and not a seal as in applicant's claim 39, the examiner agrees with applicant that Huber et al teach a face-sided cover, however there is nothing in applicant's claim language that precludes the examiner from reading this face-sided cover as being a seal. Applicant's claim 1 recites the limitation "a seal which is arranged between the checking element and the housing and which extends around a shaft". This limitation is broad and does not limit the claimed "seal" to any particular type of seal. A

Art Unit: 2837

seal, as in this case, is a device that closes, shuts, or fastens. Referring to the enclosed Fig. 1 above, the shaded area pointed to as "SEAL", is a device that closes, shut, or fastens the housing (16). This "SEAL", also referred to as a face-sided cover, is between the checking element (34 and 32 combined) and the housing (16) and extends around a shaft (26).

Also, the examiner agrees with applicant that Huber et al states that the double lip seal (28) seals the passage of the shaft (26) through the face-sided cover of the housing (16) against chips and coolants. However, applicant is not claiming what the seal is sealing, applicant is only claiming "a seal which is arranged between the checking element and the housing and which extends around a shaft". Therefore, it is not unreasonable for the examiner to read the "face-sided cover" of Huber et al as a seal as shown in Fig. 1 above, labeled as "SEAL".

The examiner also agrees with applicant that Huber et al teach a pin holder (32) is clamped via set screw (36) on the stump of the shaft (26) that projects beyond housing (16). However, the examiner does not agree with applicant that there is a space between the area between reference numbers (28) and (30), also referred to as the face-sided cover, and the checking element (32 and 34). There is nothing in the specification of Huber et al that teaches a space between the face-sided cover and the checking element. Also, referring to Fig. 1 of Huber et al, the surface labeled as "A", the surface of the checking element (32 and 34), obviously touches the surface labeled "B", a surface of the "SEAL".



Art Unit: 2837

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Renata McCloud
Examiner
Art Unit 2837

RDM
November 28, 2003

Conferees
Robert Nappi 
Olik Chaudhuri 


ROBERT NAPPI
SUPERVISORY PATENT EXAMINER

Edward J. Timmer
Walnut Woods Center
5955 W. Main Street
Kalamazoo, MI 49009